CONTRACTOR COST OUTLINE

ENERGY AND ENVIRONMENT CABINET
DIVISION OF WASTE MANAGEMENT
UNDERGROUND STORAGE TANK BRANCH
200 FAIR OAKS LANE, SECOND FLOOR
FRANKFORT, KENTUCKY 40601
502-564-5981

JULY 2011

CONTRACTOR COST OUTLINE

1.0 INTRODUCTION

The Contractor Cost Outline establishes eligible reimbursement to owners or operators of petroleum underground storage tanks for the completion of corrective action in accordance with 401 KAR Chapter 42. This document establishes the formulated task rates to be reimbursed for specific tasks performed in accordance with 401 KAR Chapter 42. This document also lists rates for equipment and personnel to perform a specific task that does not have a formulated task rates.

A cost estimate shall be based on the rates established in this outline, as applicable.

The formulated task rates prescribed in this outline include, but are not limited to, facility visits, scheduling, oversight, labor, equipment and material needed in order to perform the listed actions.

The cabinet shall not reimburse an owner or operator more than the formulated task rate specified in this outline for corrective action services performed by an eligible company or partnership, except as provided in 401 KAR 42:250, Section 14.

A fifteen (15) percent total markup above the estimated cost of materials purchased associated with a task for which there is not a formulated unit rate shall be allowed.

An eligible company or partnership that employs a subcontractor, a subsidiary company, or other vendor, that is affiliated with the eligible company or partnership or a principle of the eligible company or partnership shall not receive the fifteen (15) percent mark up for the cost of corrective action.

Reimbursement shall be made in accordance with rates identified within this outline. Refer to 401 KAR 42:250, Section 12 for eligible and ineligible costs.

Refer to 401 KAR 42:330 for unit costs applicable to the Small Owners Tank Removal Account (SOTRA).

2.0 FORMULATED TASK RATES

The following section identifies the formulated task rate allowed per task performed for actions directed by the cabinet for a facility. Unless otherwise noted, the following formulated task rates prescribed in this section shall include, but are not limited to, facility visits, scheduling, oversight personnel (one individual), labor, equipment and material needed in order to perform the listed tasks.

2.1 Mobilization/Demobilization and Mileage

The following table lists formulated task rates associated with the mobilization and demobilization of heavy equipment and drilling equipment. One mobilization and demobilization charge for oversight personnel and heavy equipment (including support vehicle), if required, shall be allowed per directive. This includes personnel time and equipment time prior to and after travel time. Mileage shall be based on one-way miles from the eligible company or partnership's nearest office to the facility. One payment (at the per mile rate listed below) shall be made for each task directed by the cabinet regardless of the number of vehicles or pieces of equipment mobilized.

Mileage allowed per mile for vehicle and oversight personnel.	$2.10 per mile
Mileage allowed per mile for heavy equipment, to include all equipment, trailers and personnel needed to transport equipment.	$5.05 per mile, minimum of $500
Mobilization and demobilization of drilling equipment and support vehicle, includes drill rig, two (2) man crew, labor for gathering of equipment, tools, travel time, and all steam cleaning.	$5.05 per mile, minimum of $500

2.2 Per Diem

The following table lists formulated task rates for per diem costs for an individual providing supervisory oversight at the facility. Per diem reimbursement for non-supervisory personnel has been integrated into the formulated task rates established. Mileage shall be based on one-way miles from the eligible company or partnership's nearest office to the facility. Per diem shall be determined based upon the following:

Drilling –1 day per diem shall be added by the cabinet per directive for drilling at a facility more than 65 one-way miles from the eligible company or partnership's nearest office, or as determined by the cabinet. Over-excavation –1 day per diem shall be added by the cabinet per directive per 400 tons (total tonnage expected must exceed 400 tons) based on a facility more than 65 one-way miles from the eligible company or partnership's nearest office, or as determined by the cabinet. Any other field work required by the cabinet at a facility (including travel-time) that would constitute more than a 10-hour day or as determined by the cabinet.	$125 per day

2.3 Equipment

The following table lists formulated task rates for necessary equipment needed to complete directed actions by the cabinet.

Field Equipment: includes field screening equipment necessary during site investigation, corrective action, or over-excavation activities for a facility.	$150 per day
Field Equipment for Vapor Intrusion Assessment: includes field screening equipment necessary during vapor intrusion assessment activities for a facility. This rate includes field equipment costs associated with site investigation and corrective action activities	$200 per day

performed in conjunction with the vapor intrusion assessment.	
Tools of the Trade: includes, but is not limited to, camera, film, film development, log books, measuring wheels, personnel protective and safety equipment, cones, barricades, and other tools or devices typically used by environmental contractors. Allowed for each day of fieldwork at the facility.	$50 per day

2.4 Asphalt or Concrete Removal and Disposal

The following table lists formulated task rates associated with asphalt or concrete removal, and disposal, including all labor, oversight personnel (one individual), equipment and material needed in order to perform the tasks.

Removal of Asphalt	
Asphalt, for 3 inches of thickness, per square foot.	$0.50 per sq. ft.
Cost of additional thickness per inch.	$0.15 per sq. ft.
Removal of Concrete	
Concrete pad, per square foot.	
4 inches thickness.	$0.50 per sq.ft.
6 inches thickness.	$0.75 per sq.ft
9 inches thickness.	$1.45 per sq.ft.
10 inches or more thickness.	$3.90 per sq.ft
With rebar.	Add 15% to cost per sq.ft.
Transportation and disposal of asphalt or concrete at a permitted disposal facility. Reimbursement shall be based on weigh tickets from the permitted disposal facility to verify tonnage.	
Nearest landfill within 50 one-way miles of the facility.	$62 per ton
Nearest landfill 50 to 100 one-way miles from the facility.	$77 per ton
Nearest landfill over 100 one-way miles from the facility.	$92 per ton

2.5 Surface Material Replacement

Eligible reimbursement for the installation of surface materials (with the exception of reseeding) for the purposes of conducting a remedial action or facility restoration (limited to surface material removed during corrective action activities) shall be based upon the costs per square foot (or linear feet for curbing as applicable) established in the lowest bid amount submitted and approved.

The following table lists formulated task rates associated with reseeding for facility restoration, including all labor, oversight personnel (one individual), equipment and material needed in order to perform the tasks.

Reseeding	
Reseeding < 1 acre.	$0.20 per sq.ft.
Reseeding ≥ 1 acre.	$0.10 per sq.ft.

2.6 Material Removal, Disposal/Treatment, and Replacement

The following table lists formulated task rates associated with excavation, disposal/treatment, transportation and replacement of material contaminated above screening levels or otherwise directed in writing by the cabinet, including all labor, oversight personnel (one individual), equipment, waste characterization and material needed in order to perform the tasks.

Excavation of contaminated material, per ton.	$5.10 per ton (minimum of $2,300.00)
Backfill from borrow area, per ton (based on tonnage of excavated material disposed), includes excavation, loading, weighing, permitting, transportation and restoration of borrow area.	$7.30 per ton
Install, compact and grade backfill, per ton. Reimbursement shall be based upon the weight of material as determined above.	$4.40 per ton
Trenching, per linear foot.	$20 per ln. ft, at 5' of depth

Backfill material: Reimbursement shall be based on weigh tickets to verify tonnage.	
Nearest quarry within 50 one-way miles of the facility.	$19.55 per ton
Nearest quarry 50 to 100 one-way miles from the facility.	$27 per ton
Nearest quarry over 100 one-way miles from the facility.	$34.50 per ton
Transportation and disposal of contaminated material at a permitted disposal facility or permitted treatment facility. Reimbursement shall be based on weigh tickets from the permitted facility to verify tonnage.	
Nearest landfill within 50 one-way miles of the facility.	$62 per ton
Nearest landfill 50 to 100 one-way miles from the facility.	$77 per ton
Nearest landfill over 100 one-way miles from the facility.	$92 per ton

2.7 Water/Product Recovery and Management

The following table lists formulated task rates associated with the transportation, treatment, recycling, or disposal of water contaminated above screening levels, including all labor, oversight personnel (one individual), equipment and material needed in order to perform the tasks.

Transportation of contaminated water removed from within the excavation zone, during permanent closure activities conducted after October 1, 2011. Cost associated with the removal of contaminated water during permanent closure, from within the excavation zone or from a holding tank, are not reimbursable unless the PSTEAF applicant is conducting permanent closure under an approved SOTRA Application for Assistance (401 KAR 42:330).	$0.12 per gallon, minimum of $300
Removal and transportation of contaminated water from an excavation, resulting from over-excavation activities directed in writing by the cabinet, or well(s) to an approved permitted disposal, treatment, or recycling facility, including truck, driver and travel time, per gallon.	$0.25 per gallon, minimum of $600
Disposal of contaminated water at a wastewater treatment plant or a recycling facility, includes all sampling and laboratory analysis required by the permitted facility, and associated charges, per gallon.	$0.45 per gallon
Removal, treatment and discharge of contaminated water from an on-site mobile unit; includes all equipment, labor, permitting, sampling and laboratory analysis required by a KPDES permit or local regulatory authority, and associated charges, per gallon.	$0.45 per gallon
Free Product Recovery (by hand bailing, absorbent socks, etc.) per well as directed by the cabinet.	$82.35 per well

2.8 Drilling/Well Installation, Sampling, and Decommissioning

The following table lists formulated task rates associated with drilling, well installation, sampling (includes chain-of-custody documentation), required surveying (excluding well decommissioning and borings) and decommissioning. These costs include all equipment and material needed in order to perform the tasks, per diem for drilling personnel, and oversight personnel (one individual). Costs associated with traffic control (if necessary) are included in the listed costs.

Installation of a PVC monitoring well: includes but is not limited to, decontamination of down-hole equipment, grout or backfill material, development of well, personnel time for soil sample collection, surface completion, preparation and submission of well records. An additional $55 per foot will be added for each well installed over 30'.	$1,755 per well up to 30' in depth (with soil sampling) $1,455 per well up to 30' in depth (without soil sampling)
Installation of PVC monitoring well in bedrock: includes but is not limited to, decontamination of down-hole equipment, grout or backfill material, development of well, personnel time for soil sample collection, surface completion, preparation and submission of well records. An additional $75 per foot will be added for each well installed over 30'.	$2,355 per well up to 30' in depth (with soil sampling) $2,055 per well up to 30' in depth (without soil sampling)
Installation of Recovery well: includes but is not limited to, decontamination of down-hole equipment, grout or backfill material, development of well, personnel time for soil sample collection, surface completion, preparation and submission of well records if a sample is collected from the well. An additional $75 per foot will be added for each well installed over 30'.	$2,355 per well up to 30' in depth (with soil sampling) $2,055 per well up to 30' in depth (without soil sampling)
Well decommissioning: includes the cost of all material, equipment and labor, including oversight personnel, the preparation and submission of well records, and surface material replacement. An additional $26.40 per foot will be added for each well decommissioned over 30'.	$792.30 per well up to 30' in depth
Soil borings: applies to those borings where monitoring wells are not required in the same location. Cost includes labor, water supply, personnel time for soil sample collection, backfilling of soil boring, and decontamination of equipment. An additional $2 per foot will be added for each soil boring over 30'.	$303 per soil boring up to 30' in depth, minimum $700.
Installation and construction of temporary monitoring well: includes down-hole material, well development, backfilling of void, and decontamination of equipment. An additional $30 per foot will be added for each well installed over 30'.	$900 per temporary monitoring well
Installation and construction of piezometer: includes down-hole material, well development, backfilling of void, and decontamination of equipment. An additional $30 per foot will be added for each piezometer installed over 30'.	$900 per piezometer
Decommissioning of Domestic-Use Cistern or Domestic-Use Well: as directed by the cabinet.	$1,601.80 each
Water Sampling (including gauging and purging for monitoring wells), per well as directed by the cabinet.	$90 per well
Low-Flow Water Sampling (including gauging and purging for monitoring wells), per well as directed by the cabinet.	$180 per well
Surface Water Sampling as directed by the cabinet.	$30 per sample point
Well Gauging, per well	$45 per well
Monitoring Well Pad Replacement: damage (e.g., cracked concrete pad, damaged protective casing, etc.), shall be reported to the cabinet in writing, and include photo documentation of the damaged monitoring well pad.	$360 per well pad replacement
Rock Coring	$129.20 per foot
Daily Rate for Direct-Push (as directed by the cabinet for bedrock soundings)	$2,273 per day
Shoring Evaluation Boring	$303 per boring

Well or piezometer top of casing elevation survey (as directed by the cabinet not in conjunction with installation or repair of a well or piezometer)	$400 per directive

2.9 Drums

The following table lists formulated task rates associated with the transportation and disposal of drums, including all labor, equipment and material costs.

Transportation of drummed tank waste (only reimbursable in accordance with 401 KAR 42:330), purged water or soil cuttings, per drum. Includes, but is not limited to all labor, equipment, personnel, scheduling, completion of documentation, and oversight if needed.	$108 per drum
Disposal of drummed tank waste, per drum (only reimbursable in accordance with 401 KAR 42:330)	Disposal cost shall be actual cost at point of disposal plus a maximum 15% markup.
Disposal of drums containing purged water or soil cuttings: includes all costs associated with this task, including the initial drum cost. Reimbursement shall be based upon the number of drums documented on waste manifests from the permitted disposal facility.	$124 per drum

2.10 Surveying

The following table lists formulated task rates associated with initial and additional site surveys, including all labor, equipment and material costs.

Initial Site Survey: this survey shall be performed in accordance with the Site Investigation Outline incorporated by reference in 401 KAR 42:060 and shall be directed in writing by the UST Branch.	$1,395 per 100' radius of the excavation zone
Additional Site Survey: for each additional directional 30-meters (100 feet) area beyond those identified on the initial site survey for a facility, as directed in writing by the UST Branch.	$700 each

2.11 Encroachment Permits and Off-Site Access Agreements

The following table lists formulated task rates associated with encroachment permits and off-site access agreements, including all labor and associated costs.

Initial Encroachment Permit	$395
Encroachment Permit Renewal	$175
Off-Site Property Access Agreement (including properly documented denials in accordance with the Site Investigation Outline incorporated by reference in 401 KAR 42:060). When an off-site property access agreement is directed in writing by the cabinet, this formulated task rate is allowed once per off-site property owner, so long as the off-site property owner is not the PSTEAF applicant. This formulated task rate is also allowed for an Off-Site Property Access Agreement, directed in writing by the cabinet, if a new eligible company is contracted.	$395
Supplemental Off-Site Property Access Agreement This formulated task rate is allowed when an additional off-site access agreement is directed in writing by the cabinet.	$230

2.12 Interim Corrective Action Activities

The following table lists formulated task rates associated with interim corrective action, including all labor, equipment and material costs.

Pump Test– as directed by the cabinet (includes the disposal or treatment of water)	
8-hr pump test.	$1,858 per test
12-hr pump test.	$2,786 per test
24-hr pump test.	$5,573 per test
Slug Test – as directed by the cabinet.	$500 per well
Mobile dual-phase extraction (MDPE) initial event, up to 24 hours. Cost includes all personnel, equipment, material needed in order to perform this task, as directed by the cabinet.	$3,000 up to 24 hours (1 day)
Continuous MDPE event, for each day after the initial event. Reimbursement shall be prorated based on the duration of system operation. Cost includes all personnel, equipment, material needed in order to perform this task, as directed by the cabinet.	$1,500 per day
Direct push injection point, up to 30' (this does not include the price of the injectant) An additional $2 per foot will be added for each direct push injection point over 30'.	$403 per point

2.13 Operation and Maintenance

The following table lists formulated task rates associated with operation and maintenance of remedial systems, including all labor, equipment and material costs.

Routine Operation and Maintenance of a remediation system per an approved Corrective Action Plan and as reported in the Corrective Action Monitoring Report, DEP8045. This formulated task rate excludes utilities.	High: $3,159 per qtr Medium: $1,685 per qtr Low: $1,053 per qtr
Unscheduled Maintenance of a Remediation System. Reimbursement shall be limited to 4 unscheduled maintenance visits per 12 month period. Additional unscheduled maintenance visits shall be approved in advance by the cabinet and shall result in a re-evaluation of the system. This formulated task rate excludes replacement of components.	$1,000 per visit

2.14 Other Tasks

The following table lists formulated task rates associated with other tasks, including all labor, equipment and material costs.

Initial Response Actions: for actions taken outside of the excavation zone, in accordance with Section 2 of the Release Response and Initial Abatement Requirements Outline incorporated by reference in 401 KAR 42:060, prior to a written directive from the UST Branch or prior to the date of a declared environmental emergency by the cabinet. The formulated task rate outlined for this item also includes preparation of the required status letter, facility sketch, description of work completed, photographic documentation, and recommendations for future actions.	$1,000 per occurrence
Site visit to reevaluate previously confirmed classification criteria when directed in writing by the UST Branch, as a stand-alone event (includes completion of an amended Classification Guide DEP8056).	$400 per request
Site visit to complete a Classification Guide DEP8056 as part of a Site Check when directed in writing by the cabinet.	$400 per request
Tank & Line Tightness Testing as directed in writing by the UST Branch in conjunction with site check, site investigation, or corrective	$590 per test

action activities for a facility.	

2.15 Laboratory Analysis

The following table lists formulated task rates associated with laboratory analysis for samples collected and analyzed. These formulated task rates include, but are not limited to the cost of preparing the samples for shipment, the cost of shipment, and sample containers.

Laboratory Analysis	
BTEX - (MTBE reporting included if directed by the cabinet for domestic-use sources)	$80 per sample
PAH	$212 per sample
Total Lead (soil)	$50 per sample
Dissolved Lead (groundwater)	$50 per sample
Trip Blank for BTEX (water only)	$80 per sample
Grain Size Analysis	$100 per sample
Ignitability	$55 per sample
Paint Filter Test	$48 per sample
pH	$40 per sample
Waste Characterization	Actual cost plus 15%
Biological Oxygen Demand	$40 per sample
Calcium	$50 per sample
Carbonate Alkalinity	$20 per sample
Chemical Oxygen Demand	$35 per sample
Dissolved Iron	$17 per sample
Dissolved Magnesium	$23 per sample
Heterotrophic Plate Count	$65 per sample
Inorganic Nitrogen	$60 per sample
Intrinsic Soil Permeability (includes all costs for collection and analysis)	$500 per sample
Iron	$40 per sample
Manganese	$23 per sample
Microbe Enumeration Studies	$105 per sample
Nitrate/Nitrite	$35 per sample
Phosphate	$31 per sample
Soil Moisture Content	$15 per sample
Soil Oxidation Reduction Potential	$40 per sample
Sulfate	$28 per sample
Sulfide	$30 per sample
Total Dissolved Solids	$25 per sample
Total Organic Carbon	$75 per sample
Total Petroleum Hydrocarbon	$75 per sample
Total Organic Nitrogen	$50 per sample
Total Iron	$23 per sample
Vapor Intrusion Assessment Laboratory Analysis	
Individual Summa Canister Certification	$100 each
Method TO-15	$300 per sample
Method 8260	$125 per sample
O2 and CO2	$100 per sample

2.16 Reporting

Formulated task rates for reporting include, but are not limited to, personnel time for preparation of the report (narrative, figures, maps, tables, amended Classification Guides, etc.), secondary reviews, modifications, revisions, any re-submittals necessary to obtain cabinet approval, clerical support, and all other direct costs such as copying, binding and delivery (e.g. mailing, faxing, hand delivery, etc.).

Initial Abatement Outline Reporting	
Initial Abatement Report	$1,120
Completion of Building Assessment DEP0058	$178.20, per building
Completion of Vapor Intrusion Assessment DEP0059	$178.20, per sampling event
Initial Vapor Intrusion Assessment Report	$2,975
Intermediate Vapor Intrusion Assessment Report	$1,910
Site Check Outline Reporting	
Site Check Report	$1,108
Site Investigation Outline Reporting	
Initial Site Investigation Report	$2,975
Intermediate Site Investigation Report	$1,905
Corrective Action Outline Reporting	
Preliminary CSM Data Gap Scope of Work Proposal	$1,665
Preliminary CSM Data Report	$2,183
Conceptual Site Model	$14,939
Corrective Action Plan – Soil Only	$3,329
Corrective Action Plan – Groundwater Only or Groundwater and Soil	$5,554
Amended Corrective Action Plan - Soil Only	$1,763
Amended Corrective Action Plan – Groundwater Only or Groundwater and Soil	$3,135
As-Built or Corrective Action- Implemented Report	$1,017
Corrective Action Monitoring Report Form DEP8045 (operating remedial system)	$1,190
Corrective Action Monitoring Report Form DEP8045 (without an operating remedial system)	$806
Corrective Action Completion Report (No further action request)	$1,492
Scope of Work Proposal (Pilot Study or Feasibility Study)	$1,427
Feasibility Study Report	$1,600
Pilot Study Report	$3,036
Risk Assessment Scope of Work Proposal	$2,886
Risk Assessment Report	$22,858
Mobile Dual-Phase Extraction Report	$1,084
Shoring Evaluation Report	$1,144
Closure Outline Reporting	
Closure Assessment Report (SOTRA)	$2,095
Optional Soil Removal at time of Permanent Closure Report (submitted with Closure Assessment Report)	$500
Miscellaneous Reporting	
Free Product Recovery Report	$500
Over-Excavation Report < 500 cubic yards (approximately < 750 tons)	$500
Over-Excavation Report > 500 cubic yards (approximately > 750 tons)	$1,287
Miscellaneous Request Report	$476

3.0 RATES

The following tables lists rates for equipment and personnel to perform a specific task that does not have a formulated task rates listed in Section 2 of this outline. The rates listed in this section shall be used when completing the Cost Estimate Form DEP6090, as applicable.

3.1 Equipment

Air compressor, less than 190 CFM	$120 per day
Air compressor, 190 CFM or greater	$165 per day
Backhoe, trailer and accessories	$60 per hr
Concrete saw	$60 per day
Concrete saw (push type)	$80 per day
Conductivity meter	$20 per day
Dingo Stand on Loader	$35 per hr
Direct-push unit (includes operator)	$1,200 per day
Drum (55 gallon), each	$35 each
DO Meter	$30 per day
Electronic water-level indicator	$20 per day
Electronic water level recorder/transducer (two well capability)	$50 per day
Electronic water level recorder/transducer (four well capability)	$100 per day
Excavator	$50 per hr
FID, OVA	$95 per day
Flow regulator (air samples only)	$40 per day
Generator	$75 per day
Grout pump	$75 per day
Jackhammer – air w/ bit and hose	$50 per day
Jackhammer – electric w/ bit	$75 per day
LEL Meter	$35 per day
Loader, Skid	$35 per hr
Multi-meter (multiple measurement device)	$30 per day
pH Meter	$20 per day
PID/Hnu Meter	$75 per day
Post Hole Auger for Bobcat	$25 per hr
Power auger (hand held)	$50 per day
Pump, 2” submersible pump, electric	$45 per day
Pump, 2” trash pump	$65 per day
Pump, 3” trash pump	$85 per day
Rock Drill	$40 per day
Self-contained steam cleaning unit	$125 per day
Steam cleaner	$85 per day
Survey equipment	$45 per day
Trencher, walk behind	$45 per hr
Trackhoe, trailer and accessories	$100 per hour
Velocity meter	$45 per day
Water truck (500 gal.) (usage must be justified)	$75 per day
Water truck (800 gallon capacity or greater) (usage must be justified)	$175 per day
6L Summa Canister Rental (weekly)	$50 each
1L Summa Canister Rental (weekly)	$50 each
Flow Regulator Rental (weekly)	$50 each
Copies	$0.10 per page
Faxes	$1.25 per page
Mileage, per mile for personnel vehicle, this is based upon the date of the directive issued.	State reimbursement rate established pursuant to 200 KAR 2:006

3.2 Personnel Rates

Professional, technical and labor rates include fringe benefits, contractor's overhead and profit. If reimbursement of labor rates is to be based upon time and material, reimbursement shall be based upon the task performed by an employee rather than the qualifications of the employee. See Appendix A for rates associated with certain tasks.

Title	Max. Hourly Rate
Professional Engineer (Licensed in KY) **Professional Geologist** (Registered in KY)	$118.80
Project Manager (Geologist, Engineer, Scientist)	$97.20
Field Technician	$70.20
Toxicologist	$135.00
Administrative Assistant	$48.60
Draftsperson/CAD	$64.80
Laborer	$43.20
Equipment Operator	$48.60
Electrical Contractor (License required)	$64.80
Apprentice Plumber	$48.60
Journeyman Plumber	$54.00
Master Plumber (License required)	$59.40

3.3 Legal Services

The following table lists rates associated with reimbursement of legal services. An invoice from the legal service provider shall be provided with a written description explaining legal costs incurred.

Legal Services	
Sole practitioner, per hour	$118.80 per hour
Partner or principal in firm, per hour	$189.00 per hour
Associate in firm, per hour	$151.20 per hour
Paralegal, per hour	$64.80 per hour

Appendix A

Personnel Tasks and Responsibilities

Professional Classification	Tasks and Responsibilities
Professional Geologist Professional Engineer	Professionally registered in the Commonwealth of Kentucky to practice geology or licensed in the Commonwealth of Kentucky to practice engineering. Duties include direct practice and/or direct oversight of the practice of geology or engineering. Ancillary duties to the practice of geology or engineering typically include developing strategies, contract meetings with clients and developing contract cost estimates. Responsible for final data analysis and interpretation, review and approval of designs, reports, plans and specifications before submittal to client or regulatory agency. Performs limited, but appropriate, levels of fieldwork, but should be continually involved in the technical aspects that involve the practice and/or oversight of the practice of geology or engineering for the entire project and reporting, in addition to the oversight of lower level professional staff.
Project Manager (Geologist, Engineer, Scientist)	Has responsibility for managing and implementing entire remediation projects, estimating costs within the project and controlling project budgets. Identifies and develops approaches for corrective action. Serves as the technical expert. Performs data compilation and presentation for analysis and interpretation by the P.E. or P.G., assists in the performance of hydraulic tests, and may prepare limited or technical sections of reports. Supervises the work of lower level professional and technical staff. Project management Report review Report preparation Development and oversee project budget Field work planning Work plan preparation Field direction, coordination, and management Coordinate with agency, client and subcontractors Equipment specifications review, selection and design Acquire property access as required by the cabinet
Toxicologist	Uses and complies data and information concerning the concentrations of chemical constituents that may be present in environmental media (e.g., soil, water, air), along with toxicological data, in order to characterize the nature and magnitude of health risks to humans (e.g., residents, workers, recreational visitors) and ecological receptors (e.g., birds, fish, wildlife). Primarily engaged when performing a Tier II or III risk assessment along with the P.E. or P.G.
Field Technician	Performs routine labor tasks related to installation, maintenance and repair of machinery and equipment. Performs routine tasks such as soil and groundwater sampling, well purging/development, etc. The majority of work performed in this classification is fieldwork. Fieldwork preparation Operation and maintenance of equipment Well development Remediation system installation Waste handling Sampling and monitoring Decontamination